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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,942	05/02/2001	Eugene G. Joseph	56654US002	6169

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EXAMINER

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
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1774

10

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,942

Applicant(s)

JOSEPH ET AL.

Examiner

Cynthia H Kelly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 21, 26-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-20, 22-25 and 40-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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In response to applicant's traversal to the restriction requirement, the restriction is proper for the following reasons. Applicant argues that there is no undue burden on the examiner to search for all of the groups. The examiner disagrees because the search for a fiber does not include a method for making a fiber article and certainly would not include the search for a substrate which has a backing. Further the groups as presented are certainly distinct as they are separately classified. A number of different searches would be required by the examiner and certainly would put undue burden on the examiner. The restriction requirement is therefore made FINAL.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20, 22-25 and 40-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel et al., U.S. pat. No. 6,133,173.

Riedel teaches a nonwoven cohesive wrap that can be used as a protective underwrap, medical tape or athletic tape which comprises pressure sensitive adhesive fibers and a non-pressure sensitive adhesive material that comprises conjugate fibers of different polymers or blends. See abstract, col. 1, line 32- col. 2, line 68 and col. 3, line 1-8. Riedel also discloses that the nonwoven wrap has a basis weight from 40-200 g/m², an elongation break from 100-900%, tensile strength of at least 40-260 g/m², and at least 150% of the load at yield point. See column 2, lines 24-25; claims 1, 2, 9-14 and Table 1, col.14. The reference also discloses that the polymeric conjugate fibers

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are substantially continuous microfibers that have a diameter generally less than 25 microns as per instant claims 1, 2 and 7. See col. 2, lines 48-50 and col. 3, lines 16-19. Riedel discloses using suitable pressure sensitive adhesives and acrylate adhesives wherein the acrylic polymer is crosslinked and comprises copolymerized monomers comprising at least one monofunctional free radically copolymer reinforcing monomers having a homopolymer glass transition temperature higher than that of the alky (methyl) acrylate monomer as per instant claims 9-11, 13-14, 19, 24 and 42. See col. 4, lines 35-38; col. 5, lines 31-55 and col. 6, lines 16-col. 7, line 26. A vinyl group such as styrene is disclosed in the reference as a suitable crosslinking agent as per instant claim 12. See col. 7, lines 35-54. The Riedel reference discloses that the non-pressure sensitive adhesive fibrous material comprises an elastomer and has a force of about 7.5-10 Mpa as per claims 15 and 20. See col. 9, lines 53- col. 10, line 3. Suitable non-adhesive materials for use in forming conjugate fibers, for use in blends with the pressure adhesive or for use as separate fibers are disclosed in column 8, line 67 though col. 9, line 25. For instance, elastomeric materials that include metallocene – type polyethylene copolymers as per instant claim 17. The conjugate microfibers can be present in the form of two or more layered fibers, sheath core fiber arrangement or island in the sea type fiber structures as per instant claim 18 (see col. 3, lines 3-8). The microfibers of Riedel meet applicant's definition of minimicrofibers made out of more than one fiber. Although the reference does not specifically teach that the weight percentages as now claimed, the Riedel reference in col. 9, does teach that the non-pressure sensitive adhesive material in fibrous form is disclosed in the reference as

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comprising 5 to 95 % of the basis weight of the fibers. This meets applicant's claim limitations as applicant claims a range of 5 to 40% of minimicrofibrous material represented by Riedel's non pressure sensitive adhesive material. The pressure sensitive adhesive would then be present in amounts which meet applicant's range. Therefore, although the percentages are not specifically stated, applicant now claims ranges for the fibrous materials which overlap the ranges of the references fibrous materials. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the claimed invention using the claimed percentages as the Riedel reference teaches the non-pressure sensitive adhesive in the same range as applicant. The pressure sensitive adhesive component would then meet the claimed range as well.

Claims 1 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks, Jr., U.S. pat. No. 4,659,923 (Hicks) in view of Riedel et al., U.S. pat. No. 6,133,173

Hicks discloses a medical sensor that uses fiber optics comprising pressure-sensitive adhesive fibers as per instant claim 46 (see abstract, col. 3, lines 10-12, col. 7, lines 55-59 and col. 8, lines 9-10). Hicks does not disclose the components of pressure sensitive adhesive fibers as per instant claim 1. Riedel teaches, in analogous art, a noncohesive wrap that can be used as a protective underwrap, medical tape or athletic tape which comprises pressure sensitive adhesive fibers and non-pressure sensitive material that comprises conjugate microfibers of different polymers or blends. The microfibers of Riedel meet applicant's definition of minimicrofibers made out of more

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than one fiber. It would have been obvious to one of ordinary skill in the art to use the pressure sensitive adhesive fibers of the Riedel patent in order to obtain a medical device that allows for the core of the device to be subjected to lateral tension forces. See Hicks, col. 8, lines 16-17. Although the reference does not specifically teach that the weight percentages as now claimed, the Riedel reference in col. 9, does teach that the non-pressure sensitive adhesive material in fibrous form is disclosed in the reference as comprising 5 to 95 % of the basis weight of the fibers. This meets applicant's claim limitations as applicant claims a range of 5 to 40% of minimicrofibrous material represented by Riedel's non-pressure sensitive adhesive material. The pressure sensitive adhesive would then be present in amounts which meet applicant's range. Therefore, although the percentages are not specifically stated, applicant now claims ranges for the fibrous materials that overlap the ranges of the references fibrous materials. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the claimed invention using the claimed percentages as the Riedel reference teaches the non-pressure sensitive adhesive in the same range as applicant. The pressure sensitive adhesive component would then meet the claimed range as well.

(11) *Response to Argument*

Applicant's arguments filed December 9, 2002 have been fully considered but they are not persuasive.

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In response to applicant's response to the 112, second paragraph rejections, all of the 112, second paragraph rejections are withdrawn due to applicant's arguments.

The 102 rejection given in the previous office action is withdrawn due to applicant's amendments to the claims.

Regarding the Riedel reference, applicant traverses the examiner's statement that the microfibers of Riedel meet applicant's definition of microminifibers are made out of more than one fiber. Applicant points to Riedel and states that the Riedel reference only discloses fibers that are greater than 10 microns. Perhaps, but Riedel also states that the fibers are 50 microns or less, which includes less than about 10. Applicant asserts that the instant diameter of the fibers is no greater than about 10 microns. The ranges as noted by applicant are very close to the range as shown in Riedel. Therefore the Riedel reference is still considered to meet applicant's definition. The examiner also notes that the range defining minimicrofiber is not claimed and that the language "about 10 microns" includes data points greater than 10 as there is no requisite value for the term about. This could include a diameter of 10.1 or even 11 microns that reads on Riedel as applicant points out.

Applicant argues that in the 103 rejection over Hicks in view of Riedel there is not a proper prima facie case of obviousness because neither Hicks nor Riedel teach the weight percentages of each fiber group as now claimed. However, the examiner disagrees. Hicks and Riedel teach medical articles using pressure sensitive adhesive fibers. Riedel further points out that different types of fibers, including pressure sensitive adhesive fibers and non-pressure sensitive adhesive fibers can be used to

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make the article. The fibers are defined as microfibers or fibers having a diameter of less than 50 microns.

Applicant further argues that there is no motivation in either of the references to combine Riedel and Hicks. The examiner disagrees because Riedel teaches using different combinations of fibers at col. 2, line 48- col. 3, line 15. Riedel specifically speaks to adding non-pressure sensitive fibers to the pressure sensitive adhesive fibers with diameter in the same range as applicant, meeting applicant's definition of minimicrofibers, although they are not called by the same name. Hicks uses the fibers in medical devices, which is the same as applicant claims. Therefore the prima facie case of obviousness is met. The reason to combine is that Riedel teaches using pressure and nonpressure sensitive adhesive materials to serve the same purpose as Hicks. Riedel also teaches in col. 1 that the use of the non-pressure sensitive adhesives along with the pressure sensitive adhesive types for the purpose of protecting the skin from the adhesive. The adhesive must adhere to itself readily but also be easily removed, yet offer high levels of breathability and adhere well to conventional medical or sport tapes. See col. 1, line 49 bridging col. 2, line 16. Riedel certainly speaks to the need of the addition of the two types of fibrous materials.

Applicant further argues that the weight percentages are not shown or suggested by the references. Although the specific weight percentages are not shown, the Riedel reference teaches in col. 9, lines 25-45 that the percentage of fibrous material in the non-pressure sensitive adhesive is between 5 and 95 %. That means that the percentage of the pressure sensitive adhesive makes up the rest. Therefore if the

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percentage of non-pressure sensitive adhesive is 5%, then the pressure sensitive adhesive must be present in an amount of 95%, meeting applicant's claimed range. IF the non-pressure sensitive adhesive is present in amounts of 20%, then the pressure sensitive adhesive must be present in amount of 80%, again meeting applicant's claimed amounts. The Riedel reference also explains why one of ordinary skill in the art would use less or more of either adhesive in col. 9, lines 34-50.

Applicant further argues that the nonwoven cohesive wrap of Riedel can only stick to itself and not other materials as necessary for the instantly claimed invention. The examiner disagrees because Riedel explains the need for both pressure sensitive and non-pressure sensitive adhesives use in the cohesive wrap to be able to adhere to itself readily, yet be easily removed and easily adheres well to conventional medical and sport tapes. As such, Riedel does not teach away from the claimed invention but seeks to have the same purpose.

In response to applicant's argument that the references have not provided proper motivation as to why one would use both pressure and non pressure adhesive fibrous materials, as explained above, Riedel provides such reasons as explained above. See also columns 1 and 2 of Riedel that show why pressure sensitive as well as non-pressure adhesive fibrous materials are necessary for combination. There was no hindsight used in forming the rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camie Thompson whose telephone number is 305-4488. The examiner can normally be reached on Mondays through Fridays from 9 to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly, can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

